

NOTE

New Host Record and Range Extension for
Dioryctria abietivorella (Grote)
(Lepidoptera: Pyralidae: Phycitinae)

In 1983, several lepidopterous larvae were found on Fraser's fir, *Abies fraseri* (Pursh) Poir., by a grower of Christmas trees in western North Carolina. One of the larvae was sent to the North Carolina State University Plant Disease and Insect Clinic and identified as *Dioryctria* sp. Later that year, five additional larvae were obtained from the same location, three of which were reared to adults (2 ♂, 1 ♀) and identified as *Dioryctria abietivorella* (Grote).

The larvae were in the last instar when collected in early August and were feeding on small (ca. 1–2 m tall) Fraser's firs growing on a plantation near Bakersville, Mitchell County, North Carolina. They had fed primarily within the terminals of the trees. Silk, frass, and needle fragments provided conspicuous external evidence of the presence of the larvae. The larvae were taken to the laboratory in Raleigh, N.C. and placed on host material collected at Bakersville. Pupation occurred within a cocoon formed at or near the site of injury; adults emerged from the cocoons about three weeks later.

In 1984, on the same plantation, the grower reported a light infestation, presumably of the same species, with larvae present August through late October (Ayers, W., 1984, pers. comm.). We were unable to obtain any of the larvae. No infestation of the plantation occurred in 1985.

Many species of fir, pine, spruce and larch have been listed as hosts of *D. abietivorella* (Hedlin, Yates, Tovar, Ebel, Koerber and Merkel, 1981. Cone and Seed Insects of North American Conifers, p. 78), but Fraser's fir has not been reported previously as a host. Host cones appear to be the favored food of *D. abietivorella* larvae (Hedlin et al., loc. cit., p. 79). There is no clear evidence that *D. abietivorella* feeds in the cones of Fraser's fir, although several undetermined lepidopterous larvae were found in 1984, associated with damaged cones in a Fraser's fir seed orchard in Crossnore, Avery County, North Carolina (Rogers, D., 1985, pers. comm.).

Hedlin et al. (loc. cit., p. 79) included only Virginia and Tennessee as the southernmost range of *D. abietivorella* in the eastern United States. It is apparent that small populations of *D. abietivorella* also occur in western North Carolina.

We thank D. L. Stephan of the North Carolina State University Plant Disease and Insect Clinic, for bringing the initial *Dioryctria* larvae to our attention, and W. Ayers for access to his land, and assistance in collecting larvae. Adults and associated larvae of *D. abietivorella* have been deposited in the North Carolina State University Insect Collection (NCSU).

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